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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,185	10/23/2000	Jeffrey William Josten	STL000038US1	9579
22462	7590	04/13/2004	EXAMINER	
GATES & COOPER LLP HOWARD HUGHES CENTER 6701 CENTER DRIVE WEST, SUITE 1050 LOS ANGELES, CA 90045			NGUYEN, CAM LINH T	
			ART UNIT	PAPER NUMBER
			2171	8

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/694,185	Applicant(s) JOSTEN, JEFFREY WILLIAM <i>Jr.</i>	
	Examiner CamLinh Nguyen	Art Unit 2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it is too brief in order to describe the invention as claimed in independent claims. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 34 recites the limitation "the computer" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahn et al (U.S. 6,135,646) in view of Kawamura et al (U.S. 5,778,388).

♦ As per claim 1- 4, 12 – 15, 23 – 26, 34,

Kahn et al (U.S. 6,135,646) discloses a computer implemented system for assigning sequence numbers, comprising:

- "A computer system" See Fig. 2, col. 5 lines 30 – 32.
- "An application" corresponds to the "digital object", which includes an "application and associated object" (See Fig. 9 element 64, col. 12 lines 17 – 19, Kahn).
- "Unique sequence number for assignment to an application" corresponds to the "handle" which is a concise unique identifier for a digital object (col. 6 lines 21 – 24). The handle includes a serial number (See Fig. 6), which is a "sequence number".
- "A sequence number assignment logic, performed by the computer system" See col. 7 lines 61 – 64. The object management system 32 includes software that creates and stores digital object, therefore, it must include logic to assign a sequence number (as shown in fig. 6) to an application (See Fig. 9 element 80).

- "The sequence number is contained in a control page stored in a database on a data storage device" See Fig. 2, element 54.
 - "A control page" corresponds to the page that stored multiple sequence number that stored in "handle server 1042", in Fig. 1, and Fig. 2 element 58, col. 9 lines 2 – 5. Since the handle server can return a list of pointers associated with the handle, the handle server must contain "a page" that stored the sequence number and the pointer.
 - "The management system" 54 corresponds to the "storage device".
- "A control page that contains a sequence number that has no restrictions on its size" (See Fig. 1 and 2). In particular:
 - "Sequence number that has no restrictions on its size" See col. 10 line 55 – 57.
- "An identifier that is a user-defined value that identifies a use for the sequence number" corresponds to the "serial number" in Fig. 5 – 6.
- "A range value (N) that identifies a range of sequence number assignments" See Fig. 7, col. 11 lines 29 – 43.
- "Updates to the control page are serialized across all of the computer systems" Kahn teaches that the identifiers are generated by multiple authorities (col. 10, lines 59 – 60). Therefore, when a new record or identifier is generated, the "control page" must be update because the handles should be globally unique across the network (col. 10, line 50).

"A starting sequence number (Starting SN) that comprises an initial value for the sequence number" See Fig. 7. The starting sequence number for handle server #1 is 0, for handle server 2 is $k+1$, and so on.

Kahn, however, does not clearly disclose that the unique sequence number is recoverable. Kahn teaches that the "handle" or "sequence number" should be globally unique across the network, and should be essentially permanent (col. 10 lines 50 – 51).

Kawamura, on the other hand, discloses a method of processing a synchronization point in a database management system. Kawamura teaches "a syncpoint acquiring part 26 for guaranteeing an operation to periodically set the databases to an integral state" (col. 5 lines 58 – 60, Kawamura). Kawamura also teaches "acquiring a synchronization point (syncpoint) in said database management system for enabling a plurality of transactions to be performed concurrently in which a restart recovery process is assumed at an occurrence of a system failure" "see claim 6 of Kawamura

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Kawamura into the system of Kahn because the motivation is to improve the accuracy of databases, keep the databases up to date for other operations, and to make the handle recoverable.

♦ As per claims 5 – 7, 16 – 18, 27 – 29, 35 – 37,

- "One or more attributes from the control page are stored in an in-memory data structure in the computer system" See Fig. 2, col. 9 lines 10 – 18 of Kahn.

- "The in-memory data structure includes one or more attributes selected from a group of attributes comprising a sequence number" See Fig. 6 of Kahn.
- "A value stored in N_REM indicates when a range of sequence numbers should be obtained from the control page" See Fig. 7 of Kahn. Each handle server includes a range of values. For example, handle server 1, the value remaining is $1 - k$.

♦ As per claims 8, 19, 30, 38,

With all limitation as discussed in claims 34 – 35, further these claims include a control page is periodically saved. Kahn does not clearly show this teaching.

However, Kawamura, on the other hand, discloses a method for update the data buffer, write data into database by acquiring a syncpoint. Kawamura teaches "a syncpoint acquiring part 26 for guaranteeing an operation to periodically set the databases to an integral state" (col. 5 lines 58 – 60, Kawamura).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Kawamura into the system of Kahn because the motivation is to improve the accuracy of databases, keep the databases up to date for other operations.

♦ As per claim 9, 20, 31, 39

- "The sequence number is latched to serialize generation of the sequence number" See Fig. 6, element 144 of Kahn.

♦ As per claim 10 – 11, 21 – 22, 32 – 33, 40 – 41,

With all limitation as discussed in claims 34 – 35, further these claims include a lock to lock the control page. Kahn does not clearly show this teaching.

However, Kawamura, on the other hand, discloses a method for update the data buffer, write data into database by acquiring a syncpoint. Kawamura teaches, “the buffer pool is again locked”, and “if the page write operation is terminated in the database 16 when the syncpoint acquisition flag 335 is OFF, the lock counter 328 is cleared to zero” (col. 14 lines 3 – 8, Kawamura).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Kawamura into the system of Kahn because the motivation is to improve the concurrency access for other transaction while performing the update for the database.

Response to Arguments

3. Applicant's arguments filed 03/15/2004 have been fully considered but they are not persuasive.

Applicant argues that the references do not teach or suggest storing the sequence numbers in a control page, wherein the control page is stored in a database on a data storage device coupled to the computer system and shared with other computer systems, and updates to the control page are serialized across all of the computer systems. The examiner respectfully disagrees.

Referring to Fig. 7, each handle server controls a range of sequence number such as 0 – k for handle server 1. As discussed above, the handle server must include a page that is able to store multiple sequence numbers. When a page that included in

handle server, this handle server must include a storage device to store the page. Kahn teaches that the identifiers are generated by multiple authorities (col. 10, lines 59 – 60). Therefore, when a new record or identifier is generated within the range, the “control page” must be updated. The handles should be globally unique across the network (col. 10, line 50), therefore, the update to the control page are serialized across all of the computer systems.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CamLinh Nguyen whose telephone number is 305-1951. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703 - 872 - 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

LN

W. Amsbury
WAYNE AMSBURY
PRIMARY PATENT EXAMINER